

# **An e-Governance System for Managing Cultural Heritage in Urban Tourist Destinations: The Case of Genoa**

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**Abstract:** e-Governance is becoming a unique challenge to urban tourism destinations, and the role of city and metropolitan government in managing interactions between culture and tourism bodies is of growing importance. Given the complex nature of cities, the management of urban tourist destinations requires a participatory approach based on governance principles and ICT tools. This paper focuses on the development and application of a new geo-referenced e-participation tool for managing cultural heritage in urban tourist destinations. It is based on a 'bottom-up' development approach and a public participation process and it is used for promoting the role of social actors in the process of recognising territorial cultural heritage and its effective management benefiting the local community, citizens and the visitors. The main benefit of such approach is a working "compromise" between the image of the city as promoted by the decision-makers and the vision that the other social actors have of the locality and its interpretation. This approach also allows (re)discovering local identities, existing links with the place, its cultural and symbolic values, and to identify which e-services should be developed to improve access to cultural heritage and to valorise its intangible values. It is applied to the city of Genoa (Italy), as part of an on-going EU FP6 Project ISAAC "Integrated e-Services for Advanced Access to Heritage in Cultural Tourist Destinations".

**Keywords:** e-governance, e-participation, e-services, Information Communication Technology (ICT), cultural heritage, blended focus groups, planning-action-revision, added values, cultural tourist destinations, bottom-up approach, GeoBlog.

## **1. Introduction**

Localities and tourism destinations in Europe need intelligent environments that will increase access, exploitation, as well as an efficient management of their local heritage. Integrated e-services can link heritage with tourism to unlock and promote the value of European cultural heritage assets. The term cultural heritage is quite broad and encompasses many aspects. Part of our heritage is visible, in the sense that it has a physical existence. Part of it is intangible and immaterial, such as cultural events, urban traditions, atmospheres, sense of wellbeing, panoramas, etc. but nevertheless it represents a fundamental component of current cultural tourism in Europe.

Existing “top-down” approaches of defining and utilizing the “objectively recognised heritage” of cultural tourism destinations, however, are often failing to employ effectively diverse local assets (tangible and intangible) for the sustainable and competitive development of the host community. Innovative techniques for management, preservation, development and interpretation of cultural heritage are therefore necessary, involving different social actors to define and manage the cultural heritage assets of their territory as to experiencing them in their fullness, diversity and complexity. Recognising cultural diversity is the starting point between interpretation and representation of the tourist objects present in the territory, no longer in a static and “objective” way, but instead by priming “catching” processes that are able to create an active network among local actors and the physical milieu.

Information and Communication Technologies (ICT) can help to create user-friendly interfaces in cultural destinations that can widen the accessibility and use of heritage goods through participation and public engagement in the decision making, using the “City e-governance” paradigm [1]. This refers to the use of digital technologies by government agencies to facilitate effective decision making and improve public policies in the local communities by transforming relations with citizens, businesses, and other arms of government for achieving common policy goals and has several key dimensions: (i) It is system of organizational structures, functions, processes and policies for deploying ICTs in urban government that support effective and efficient interaction, cooperation, and decision-making based on partnerships and local alliances; (ii) It emphasizes the ability and capacities of local government to engage in networks with other organizations (IT companies, local communities and businesses) for a better decision- and policy-making; (iii) It is not a means itself but is instrumental to achieving goals, i.e. it is a means to an end and includes the results of the actions and their impacts; (iv) It is an essential instrument to government modernization and innovation geared toward increasing the common public value; (v) It emphasizes the collaborative and inclusive nature and relationships between government, businesses, citizens and community organizations aimed at maximizing the benefits of strategic partnering, networking and coalition building; (v) It is a policy option of urban making where continuously increasing and strengthening the public value is a guiding benchmark of government success.

This study applies a novel methodological approach to the understanding and management of cultural heritage’s assets using collaborative techniques and ICT tools [2]. The study is part of the European ‘Framework Sixth’ Project ISAAC: Integrated e-Services for Advanced Access to Heritage in Cultural Tourist Destinations, a multi-disciplinary research initiative aiming to valorise cultural assets as tourism resources through user-friendly and stakeholder-relevant integrated e-services in urban tourist destinations.

## **2. Objectives**

This study has the following main objectives:

- To develop a geo-referenced e-participation tool as an instrument for involving different social actors in decision-making processes about cultural assets in urban destinations. This is based on a ‘bottom-up’ public participation process [3], promoting the role of residents, tourists and service providers in the process of recognising the territorial “cultural heritage” and its effective management. The tool is applied to city of Genoa.
- To map the cultural heritage in the city of Genoa as perceived by the citizens. A major benefit of this mapping is the identification of what citizens perceive as the most significant cultural heritage in Genoa and the associated “added values” of the territory. This allows re-discovering local territorial/cultural identities, linked with social, historical, cultural, traditional, environmental and emotional factors, taking into account people personal experience, links with the place and knowledge of the territory [4].

- To identify which specific e-services, as suggested by citizens, should be activated to improve access to cultural heritage and to valorise its assets in terms of tangible and intangible heritage, the latter being more difficult to preserve. In this sense the development of new e-services would aim to preserve and promote local identities in terms of traditions, customs and practices, aesthetic and spiritual beliefs, artistic expressions, language, symbolic and social values.
- To classify the proposed e-services packages in terms of their participation level - from information to citizens' participation involvement in decision-making. The purpose is to understand which of these e-services categories are already accepted and used by people, which should be further promoted and why.

### 3. Methodology

The methodology used to develop the geo-referenced e-participation system is an integrated approach combining ICT tools with specific focus group techniques to apply participatory processes among different social actors. The tool is applied to the city of Genoa, Italy.

The methodology includes two phases. A first phase involves the construction of a new user-friendly geo-referenced Web system ([www.isaac-genovaculture.eu](http://www.isaac-genovaculture.eu)) as a tool to facilitate listening, communication and participation with different social actors. This tool allows people to interact in a participatory system using e-blogs and e-forum instruments with privacy security. The second phase has the objective to activate the participatory process by effectively involving the different social actors. This is based on an innovative methodology, the “Blended Focus Groups”, which alternates in-person meetings with on-line discussion and e-learning modules. The on-line discussion is structured and moderated inside the reserved area of the ISAAC e-governance web site. The Web represents therefore a scaffolding to sustain and extend debates that have been started in a previous face-to-face discussion. This methodology has been developed by Chiarullo and Rocca (2003) in the context of waste management and sustainable development, and it is used for the first time to address issues related to cultural heritage valorisation, accessibility and management. This mixed methodology is highly suitable for complex and diverse debate and dialogue, allowing people to autonomously manage time and places for participation.

Four main groups of social actors are considered - local residents, tourists, local service providers (tourist agencies, cultural associations, museums, municipality, and so forth) and external (nation-wide) service providers who operate at a higher level than local associations (IT providers, associations for the conservation of historical and artistic heritage). The entire design phase of this system is characterized by a recursive “planning-action-revision” cycle [5], which typically describes the participatory action-research, as reported in figure 1. The two phases described above have been monitored using a satisfaction analysis questionnaire in order to evaluate the ISAAC e-governance website and the focus groups process, according to the users' expectations and satisfaction. Finally, the SERVQUAL questionnaire [6] was used to measure appreciation of quality by assessing the gap between expectations and perceptions (satisfaction) of the actual service provided.

In order to activate the participatory process, five blended focus groups have been administered in the period April 2007–February 2008, each of them involving 8-10 participants (residents, tourists, local and external service providers). The focus groups have been held in the FEEM Cultural Factory of Genoa.

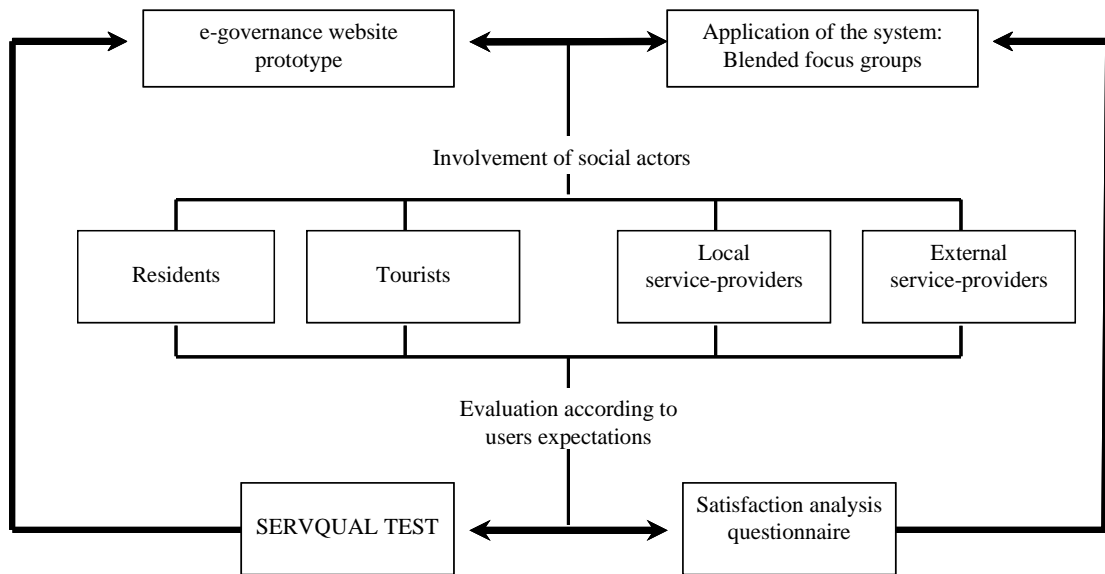


Figure 1. The e-Governance System Following a "Planning-Action-Revision" Cycle

## 4. Results

### 4.1. Perceived Cultural Heritage in Genoa and Added Value for the Territory

Participants to focus groups have mentioned about 58 sites (cultural resources) as relevant according to their historical, social, cultural, tourist, environmental and emotional values. Local and external service providers have mentioned the highest number of sites (30 and 36 respectively), and they have been more prone to capture the historical and cultural values. This result reflects our expectations as service providers are more informed about the cultural supply in the city. Residents and tourists have identified a lower number of sites (24 and 22 respectively) and have been more prone to capture the cultural and tourist values. Environmental values have been revealed mainly by the residents, while emotional values have been mentioned equally by residents and tourists.

The list contains both famous cultural sites (associated with the city of Genoa and inserted in the traditional tourist circuits<sup>1</sup> and less notorious sites (ex. Boccadasse). Besides the most traditional sites, commonly associated with the city's history and culture (as museums, palaces, churches, etc), there are also sites which are perceived as relevant for their social, environmental and/or emotional values (ex. Piazza delle Erbe). These latter are particularly linked to the participants' personal experience and therefore they are associated with the diverse local territorial identities and with a sense of belonging to the territory. As regards tourists, it should be noted that they have particularly appreciated habits and traditions linked with specific sites. This shows a tourist image who wish to know the history of the city and its past life, as well as its daily life, traditions and customs.

Table 1 reports the sites mentioned and the perceived territorial added values, together with the frequency of citation (in percentage). For the sake of comparison we report the sites common to at least three of the social actors involved.

The following main observations arise from analyzing table 1: (i) the "Ancient Port" is mainly perceived as a tourist site (44% of the preferences) instead of historical as one would expect from this area of the city having strongly influenced the history of the city; (ii) the "Acquarium", one of the most important attraction of the city, is mainly associated with environmental values (accounting for 43% of the preferences) and only partially with tourist and cultural values; (iii) the "Lanterna", being the ancient lighthouse of the port and therefore symbol of the city, is associated with tourist and cultural values (in total 66% of the preferences), and is not linked to environmental values, despite the beautiful landscape

and the walk connecting this area to the city. A major benefit of such approach is a working “compromise” between the image of the city as promoted by the decision-makers and the vision that the other social actors have of the destination and the territorial interpretation.

Table 1. Added Values for the Territory of Genoa (Percentages).

<b>Cultural Sites</b>	<b>Historical</b>	<b>Cultural</b>	<b>Tourist</b>	<b>Social</b>	<b>Environment</b>	<b>Emotional</b>	<b>Total</b>
Historical Centre	26	31	18	18	-	8	100
Via Garibaldi	28	39	20	7	-	7	100
Lanterna	35	23	31	8	-	4	100
Ancient Port	8	19	44	8	14	6	100
Boccadasse	10	3	31	14	28	14	100
Nervi Gardens	-	18	29	8	34	11	100
San Lorenzo Church	33	17	25	25	-	-	100
Aquarium	-	14	21	21	43	-	100
Carignano	38	38	-	-	-	25	100
Faculty of Architecture	44	33	22	-	-	-	100
Walls and fortresses	30	15	20	5	25	5	100
Art Oriental Museum Chiossone	9	36	18	18	9	9	100
Spinola Palace National Gallery	29	29	14	29	-	-	100
Piazza delle Erbe	-	-	17	67	-	17	100
Castelletto area	10	-	50	10	30	-	100

#### 4.2 Proposed e-Services for Managing Cultural Heritage in Genoa

For each of the previously reported sites in Genoa, focus groups participants have been asked to identify specific e-services for improving access to local cultural resources. These results allow identifying expectations and needs for e-services development.

The e-services suggested by the focus groups participants can be classified into three main groups: informative, communicative and participative e-services [7] [8]. The first group is characterised by e-services where the user has a passive attitude, as he just receives information and data without any interaction with other users or with service providers. The informative e-services proposed by the participants are the following: “web information” (web pages including historical/cultural/tourist data and other information about traditions, habits, etc.); “profiling” (allowing the users to identify themselves with a specific “profile” and to access selected information, avoiding information overload); “interactive map with virtual tours” (offering tourist itineraries according to users’ requests, together with virtual tours of the main attractions or particularities along the itinerary and cultural/historical/tourist information as well); “video, photo and audio downloading” (materials and multimedia documents downloadable on PC, cell phone and palm); “promotional spot” (updates about tourist/cultural attractions sent using SMS by a local telephone operator during the visit); “virtual games” (as an opportunity to explore the city as a cultural destination and/or to use the city as a set for popular on-line games); and finally “journey planner” (software that makes it possible to plan a trip to any tourist destination, by downloading maps, guided tours, means of transport, etc.).

The second group includes communicative e-services, where the user has an active attitude; he is not just the repository of information; a dialogue is instead established among users and with service providers. The proposed e-services which can be classified in this group are “blogs and personal promotion”, and “e-communities”. In “blogs and personal promotion”, the user becomes the author of the web content, and is therefore at the same

time broadcaster and receiver. He can upload and share personal photos, videos and other materials about the visit and converse with other users. In “e-communities”, groups of users exchange information and dialogue on specific issues, using web forums, chat rooms, instant messaging programs such as msn messenger. This makes it possible to form virtual communities of people interested in a common subject.

The suggested informative and communicative e-services are seen, according to the respondents’ expectations, as a mean to spread knowledge about local traditions and habits, to discover typical local dishes, stories linked with the past, traditional beliefs, practices, customs, jokes and songs, which are typically handed down orally or behaviorally from individual to individual. These aspects have been particularly emphasized with respect to the “Historical Centre”. The web becomes therefore an instrument to spread a knowledge related to intangible resources, namely local folklore which is important to preserve in today’s globalised world.

The third group includes services establishing a participatory system, where the user is involved in the cultural heritage management at various stages of the decision-making process. This group includes “e-governance” services, which are promoted to facilitate direct interaction between citizens and local authorities. The objective is to involve the citizens directly in the decision-making.

#### 4.3 e-Services Development: Which Model Should be Prioritised?

The rapid and widespread increase in the development and use of e-services raises some questions: which e-service categories should be promoted for business development in the near future? Are people ready to be involved in e-participation processes?

To answer these questions, a specific focus group was organised, where participants have been asked to rank the suggested e-services from the highest priority to the lowest one. The objective was to analyse the relative importance or weight of the service categories previously identified (informative, communicative and participative). For the analysis, the first three priorities have been considered, and the average number of preferences recorded in each service category has been calculated. This analysis shows the present phase of e-services development, and therefore which category should be promoted nowadays.

In Figures 2 and 3 we report, as an exemplification, the average number of preferences (for one of the first three positions in the ranking) assigned to each category, with respect to the “Historical Centre” and the “Lanterna”.

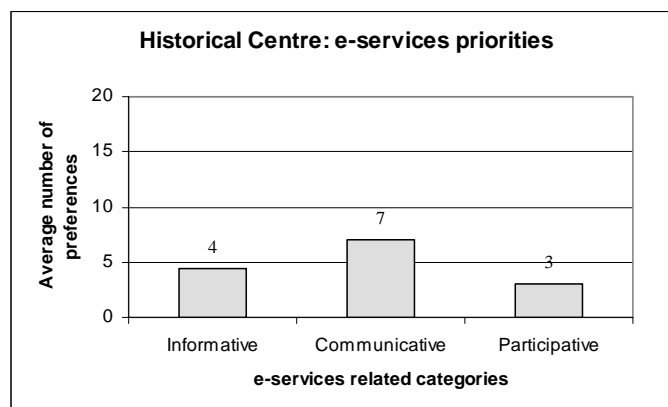


Figure 2: Priorities for e-Service Categories

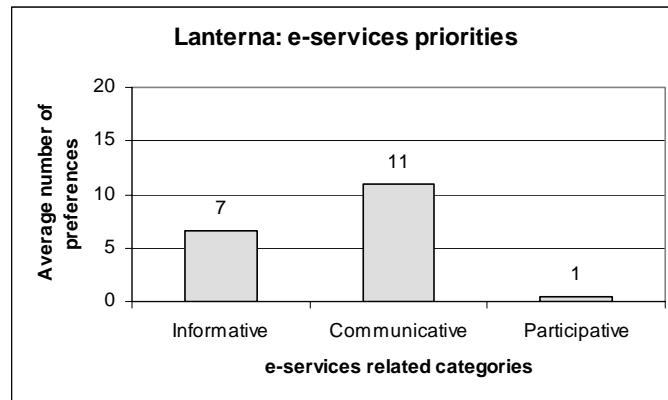


Figure 3: Priorities for e-Service Categories

Results show that communicative e-services are perceived as the most important services for both the Historical Centre and the Lanterna. This result applies to all the cultural sites identified by the focus groups participants in the previous stage. The second most important e-services are the informative ones, while the participative services have the lowest relevance. The “Historical Centre” is the only site where the participative e-services assume nevertheless a quite important position, while for the other sites in Genoa these services are perceived at the moment as much less significant.

These results suggest firstly that the citizen is more and more aware of the potential of the web, which is a useful instrument not only to provide information and updating on events and cultural activities, but also to promote a dialogue among citizens on the web and to create virtual communities interacting and exchanging ideas and knowledge on specific issues about cultural heritage. The network becomes a virtual space for meetings and dialogue, encouraging a continuous exchange between the real and virtual worlds and thus promoting local products, knowledge and experience. The network has also the advantage to make more visible the learning process which is set up. On the other side, the use of the web to promote decision-making and specific actions over the territory is still not considered. On-line participation is seen with suspect and scepticism. Despite the growing necessity of active participation of all social actors in the “collective” decision-making, the web is not yet taken as the right instrument to use for this purpose, most likely because of the lack of awareness and knowledge from the citizens.

## 5. Conclusions

This proposed e-governance geo-referenced tool allows to attain a number of objectives: (i) to recognise Genoa territorial heritage “from below” through the representation and sharing of visions of the territory; (ii) to create a “network of the territory” and “territorial network”, a virtual meeting place where local identity can evolve through a continuous exchange between real and virtual territories and users; (iii) to create an innovative model for surveying the territory and to elaborate strategies and actions for development and management; (iv) to promote a local culture of responsibility for the place where a person lives, works and enjoys; (v) to use ICT and the Web as effective tools for implementing an e-participation process in the community; and (vi) to diffuse the results of that process widely among the parties concerned.

The results from its application also allow the identification of specific e-services packages. A classification of these e-services in terms of their participation level - from information to citizens’ involvement and participation in decision-making - has shown that, at the moment, e-participation is still seen with suspicion and skepticism by citizens. On the contrary, the communicative e-services are perceived as most relevant for cultural heritage management in the urban destination. Overall, however, the e-governance website and the

geo-referenced tool supporting the participatory process have been recognized by the social actors as an effective mean to communicate and interact among them and with the municipality of Genoa. In conclusion it should be noted that the e-governance system have allowed city managers to shift from the existing 'bottom-up' decision-making practices to inclusive and participatory management in the heritage and tourism sector and at the same time encouraged players to create critical mass for the effective sharing and exchange of information and elaboration of new integrated e-services for cultural tourism and heritage.

The study findings thus call for a broader intellectual and scientific development of the e-governance paradigm in general and the specific participatory processes and tools that can help cities to better utilize their cultural heritage resources based on the stakeholders' views and aspirations about their development as cultural tourism destinations as well as the handling of the specific heritage sites and urban areas. In the ICT sector, both in research and commercial implementation, the implication will be to create new interest in ICT and to encourage the use of cutting edge technology for this purpose. But achieving this requires further researches of the technological challenges and opportunities in internet in the context of synergy between digital tourism and cultural heritage, as well as the business and socio-economic possibilities that the e-governance systems offer for strengthening the information base and knowledge infrastructure of cultural heritage in tourism localities.

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<sup>i</sup> The list of the most famous sites is published in the Promoting web portal of Genoa City Council in <http://www.turismo.comune.genova.it/spip.php?article292>